This listing of claims will replace all prior versions, and listings of claims, in the application.

Listing of Claims:

1) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model, ~~in order to associate to each of said geometric cells a specific geometric feature,~~ the method comprising:

receiving input comprising one or more constraints relating to geometric cell information, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine whether the cell meets the requirement of the constraint, wherein the declarative syntax is simple and intuitive; and

generating a list of geometric cells meeting the requirements of the constraints.

2) (Canceled)

3) (Currently Amended) A CAD/CAM apparatus comprising:

an input device;

a central processing unit; and

a display device;

wherein the central processing unit runs an application program comprising code for:

displaying a representation of a model, said model comprising a plurality of geometric cells ~~each comprising geometric cell identification data and data defining a geometric feature of the model that is associated with said geometric cell~~;

receiving input comprising one or more constraints relating to geometric cell information of the model, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint, wherein the declarative syntax is simple and intuitive; and

generating a list of geometric cells meeting all of the requirements of the constraints.

4) (Canceled)

5) (Currently Amended) A computer data signal embodied in a digital data stream comprising data representing the identity of one or more geometric cells of a model, ~~each of said geometric cells comprising geometric cell identification data and data defining a geometric feature of the model that is associated with said geometric cell, and~~ wherein said data stream is generated by a system operating according to a method comprising:

receiving input comprising one or more constraints relating to geometric cell information, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint, wherein the declarative syntax is simple and intuitive; and

generating a list of cells meeting all of the requirements of the constraints.

6) (Canceled)

7) (Currently Amended) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing a means for identifying geometric cells of a model, ~~in order to associate to each of said geometric cells a geometric feature and said geometric cells comprising geometric cell identification data,~~ the method comprising:

receiving input comprising one or more constraints relating to geometric cell information, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint, wherein the declarative syntax is simple and intuitive; and

generating a list of geometric cells meeting all of the requirements of the constraints.

8) (Canceled)

9) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model, ~~in order to associate to each of said geometric cells a specific geometric feature and each of said geometric cells comprising geometric cell identification data, and~~ the method comprising:

a) receiving input comprising one or more constraints relating to geometric cell information, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

10) (Canceled)

11) (Currently Amended) A CAD apparatus comprising:

an input device; and

a central processing unit;

wherein the central processing unit runs an application program comprising code for:

a) receiving input comprising one or more constraints relating to geometric cell information of a model, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the geometric cells of the model and retaining as a subset only the geometric cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of geometric cells and retaining in the subset only the geometric cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

12) (Canceled)

13) (Currently Amended) A computer data signal embodied in a digital data stream comprising data representing the identity of one or more geometric cells of a model, wherein said data stream is generated by a system operating according to a method comprising:

a) receiving input comprising one or more constraints relating to geometric cell information~~; wherein said geometric cells comprises geometric cell identification data~~, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

14) (Canceled)

15) (Currently Amended) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing a means for identifying geometric cells of a model ~~in order to associate to each of said geometric cells a specific geometric feature~~, the method comprising:

a) receiving from a user an input comprising a script comprising one or more constraints relating to cell information, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) based on the received script, searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

16) (Canceled)

17) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for specifying geometric cells of a model ~~that a user wishes to be a target for association of a geometric feature~~, the method comprising specifying at least one constraints chosen from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell,

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive; and

selecting a plurality of geometric cells based on the specified at least one constraint;

based on the selected plurality of geometric cells~~, receiving input from a user to associate geometric features to said selected cells~~.

18) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model meeting the requirement of one or more constraints of a cell descriptor ~~in order to associate with each of said geometric cells a specific geometric feature, each of said geometric cells comprising geometric cell identification data~~, the method comprising:

determining for each constraint of said cell descriptor those components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint; and

identifying a list of geometric cells that meet the requirements of all of the constraints ~~of said input~~, wherein at least one of said constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive.

19) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for defining three dimensional objects using a textual description, the method comprising:

receiving textual input specifying one or more pre-defined geometric parts, and the location and size of such parts;

generating geometric cell information for such parts;

receiving input comprising one or more constraints relating to the cell information of such parts, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

for each constraint, determining whether the cells of such parts meet the requirements of the constraint; and

generating a list of cells meeting the requirements of the constraints.

20) (Canceled)

21) (Original) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing means for defining three dimensional objects using a textual description, the method comprising:

receiving textual input specifying one or more pre-defined geometric parts, and the location and size of such parts;

generating geometric cell information for such parts;

receiving input comprising one or more constraints relating to the cell information of such parts, wherein at least one of said input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

for each constraint, determining whether the cells of such parts meet the requirements of the constraint; and

generating a list of cells meeting the requirements of the constraints.

22) (Canceled)

23) (Currently Amended) A method of identifying geometric cells in a CAD/CAM system ~~in order to associate to each of said geometric cells a specific geometric feature,~~ the method comprising the following steps:

creating a set of scripting rules for describing one or more characteristics of geometrical cells in said CAD/CAM system;

receiving a user script input describing one or more characteristics of the geometrical cells to be identified, said user input using said set of scripting rules, wherein said scripting rules specify geometrical cell information selected from the group consisting of:

a) geometrical cell information relating to cell dimension;

b) geometrical cell information relating to the topology of a cell;

c) geometrical cell information relating to the history of the model evolution;

d) geometrical cell information relating to specific attributes of a cell; and

e) geometrical cell information relating to geometrical indications of a cell, and wherein said user script input is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

interpreting said user input for translating said described characteristics into one or more cell selecting commands;

selecting the cells that meet all the described characteristics, using said cell selecting commands.

24) (Previously Presented) The method of claim 1 further comprising:

automatically selecting previously associated geometric features of the model based on the generated list of cells; and

receiving a user input to execute a change to each of the automatically selected geometric features.

25) (Previously Presented) The method of claim 1 wherein the declarative syntax comprises a scripting language program received as a CAD system user input.